

Application No. 10/541,488
Amendment dated December 21, 2006
Reply to Office Action of September 28, 2006

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Page 7

REMARKS/ARGUMENTS

Claims 7 and 8 have been amended to replace the term "outlets" with the term --outlet ports--. It is believed amended claims 7 and 8 now comply with 35 U.S.C. 112(2).

Claims 7 and 13 through 16 were rejected as being anticipated by Farrell United States Patent 3,809,515. Reconsideration of this rejection is requested.

Farrell teaches a die for blow molding plastic and Figure 1 discloses an arrangement where two supply streams of plastic are introduced centrally through the die arrangement with each stream of plastic passing outwardly through a series radial passages 34 to a series spiral grooves indicated by reference characters 92a through 92e. These spiral grooves provide plastic to the extrusion ring passage, for example, 138. Therefore, molten plastic is forced through the series of spiral passages 92a through 92e with the plastic then being provided to a ring passage performing the extrusion. One such ring passage is labeled 138.

The adjustment associated with this extrusion die includes the adjustment screw 144 that moves the ring member 118 and effectively throttles the ring passage through which the plastic flows. This arrangement is in contradiction to the claimed structure where a first adjustment means is provided upstream of and spaced from the outlet ports. It is important to be able to adjust the flow at such an upstream position as adjustment near the extrusion port is difficult to control and affects the flow at this critical point. Furthermore, this is a congested area.

Application No. 10/541,488
Amendment dated December 21, 2006
Reply to Office Action of September 28, 2006

Page 8

It can be appreciated that this prior art reference teaches a different structure and is in contradiction to the arrangement now claimed. The adjustment mechanism of Farrell is in contrast to the simple valve type arrangements shown by the adjustment member 53 in Figure 3 and shown in additional detail in the sectional view of Figure 5. The distributor of Figure 6 shows how each of the four channels is associated with each plastic supply has its own simple valve adjustment mechanism provided at this upstream position with the discharge from these channels being provided to a large ring shaped mouth opening of the first or second internal die passages. Therefore, the flow of plastic to the die passages is adjusted at an upstream position to effect balancing.

Claims 7 through 9, 11 and 13 through 22 were rejected as being obvious in light of German reference DE 29517378 in view of United States Patent 3,809,515. It is respectfully submitted that the German reference teaches a different approach and is in direct contradiction to an adjustment mechanism associated with the flow path. According to the German reference, a series of equal length flow paths are provided to a series or host of outlet points provided about an extrusion passage. Balancing is achieved by having a structure where the length of each passage is the same and the size of the passages is the same. In this way, the passages should pass the same amount of plastic, and therefore, an even distribution of plastic about the extrusion port should be achieved. It is apparent that any adjustment mechanism, and in particular, an adjustment mechanism provided at the extrusion port, as required according to the secondary reference, would be in direct contradiction to the principles of the primary reference. Furthermore, even if these references were combined, in contradiction to the teaching thereof, the resulting combination would not provide an adjustment means upstream of such an extrusion point or port.

Application No. 10/541,488
Amendment dated December 21, 2006
Reply to Office Action of September 28, 2006

Page 9

In light of the above arguments and amended claims, reconsideration and allowance of these claims is requested.

Additional claims in the application are further rejected based on the German reference in view of Farrell and in view of additional references. As the first two references are incompatible as argued above, it is respectfully submitted that combining a third reference does not overcome the incompatibility of the first two references. In light of the above, reconsideration and allowance of the remaining claims is also requested.

Claims 21 and 22 were rejected under 35 U.S.C. 112(1) as failing to comply with the written description. Claim 21 requires that the flow distributor, for example, flow distributor 25 is in a plane across the first internal die passage of the die tooling such as passage 4 or 9 as shown in Figure 3. Thus, the flow distributor 25 shown in Figure 3 is across both of the passages 4 and 9. This arrangement is described on page 6, lines 11 through 31 and at other points in the disclosure. For example, see page 5, lines 34 to the bottom of the page.

Attention is also directed to the summary of the invention on page 2, lines 20 through 26 where it states that the flow distributor, described as a plate structure, covers the ring shaped mouth of the die tooling.

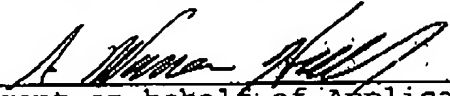
With respect to claim 22, it has been cancelled from the application.

Application No. 10/541,488
Amendment dated December 21, 2006
Reply to Office Action of September 28, 2006

Page 10

In view of the above, reconsideration and allowance of
the application is requested.

Respectfully submitted,


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